

Significant Features of the Early Census Returns

THE nation's gain in population between 1920 and 1930 was the largest, numerically, ever recorded by the Federal Census. Continental United States on April 1, 1930, was found by government enumerators to have had 122,698,190 people, or 16,987,570 more than the number reported for January 1, 1920. This increase exceeds by more than a million the largest previous gain, that occurring in the period 1900-1910.

No business is more interested in the revelations of the census than is the telephone industry. Its service is so closely identified with commercial and social activities throughout the United States that any marked changes in the size, distribution, and characteristics of the nation-wide market have an important bearing on its development. Operating companies are faced with the problem of engineering their facilities to meet adequately the requirements of new subscribers, and this expansion in exchange service is definitely related to population growth. Likewise, growth in toll usage and in the demand for special contract services are closely associated with the increase in population.

Early reports of the recently completed census have furnished valuable data on population changes in the United States during the past decade. There has been considerable variation in the rate of growth between different sections of the country as well as between different types of communities; and several pronounced tendencies may be observed in the distribution of population throughout the United States. Many of the changes are fundamental in character and far reaching in effect. The time seems opportune to examine the census returns so far available and to note some of the more

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

important features of special significance to the telephone industry.

The question naturally arises as to how the numerical difference between the 1920 and 1930 census totals attains such an unprecedented level in view of the notable decline in the birth rate since 1920 and the drastic legal restrictions placed upon foreign immigration in the early part of the past decade. The figure of nearly 17,000,000 is $2\frac{1}{4}$ million in excess of the growth realized during the previous decade, when the net immigration was 25 percent greater and the rate of natural increase some 10 percent higher. Moreover, many individuals have claimed that they were missed by the census enumerators, while some local chambers of commerce have held that the census figures for their communities were too low. This idea of an undercount, instead of adding to the apparent discrepancy between the two censuses, may actually provide an explanation. The 1920 census likewise may have been an undercount—and to a greater degree than the 1930 census. If this be true, a portion of the reported increase in population between the two dates would thus be due to the greater thoroughness of the recent census as compared with the enumeration in 1920.

A variety of factors indicate that the 1930 census may have been taken with greater efficiency than those of 1920, 1910 and 1900, all of which were apparently made on about the same basis. In 1930 the enumerators seem to have been more carefully selected and trained, and they received relatively higher compensation. Greater ease of communication resulting from better rural roads and more extensive telephone service, the policy of having local supervisors make preliminary announcements of census returns from their districts (thus permitting recounts where reasonable doubt regarding the accuracy of the figures seemed to justify them), and a better organization and supervision of the overall undertaking have all apparently played a part in making the enumeration more

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

closely descriptive of the facts than perhaps had been possible at any previous time. In all probability the increased efficiency was most pronounced in the high density sections of large urban centers where the concentration of the poorer classes in crowded quarters would tend to make complete enumeration difficult, and in sparsely settled rural areas where scattered population might not be readily accessible and therefore might be easily missed. Although no definite correction of any excess of the reported decade increase over actual growth can be made until the detailed tables on age, sex, and nativity are available (so far only preliminary total population figures for states, counties and principal cities have been announced), it is probable that the elimination of the excess would reduce the average annual increase to about the same level as was experienced between 1910 and 1920. This would give a total increase of 13 percent for the decade, as compared with 15 percent from 1910 to 1920 and 21 percent in the previous ten years.

While this decline in rate of growth has been due partly to the diminished stream of immigrants, a more important factor has been the tendency for birth rates to fall much more rapidly than death rates. In 1910 the birth rate was about 30 per 1,000 population and the death rate was 15, while at present the birth rate is very close to 19 and the death rate about 12. Thus, in twenty years the margin which represents natural increase in population has decreased from 15 per 1,000 to 7. The reduction in the death rate has been accomplished almost entirely by reducing the infant mortality, while the rate in middle life and beyond has shown, if anything, a tendency to rise. Factors contributing to the decline in birth rates are generally higher living standards, smaller living quarters, marriages in which both husband and wife are breadwinners, the tightening of immigration restrictions against the prolific races, and finally wider knowledge and utilization of birth control information.

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

URBANIZATION OF THE POPULATION

Since most of the factors tending to lower the birth rate are more prevalent in the cities than in the country, the decrease in the rate is particularly significant in view of the rapid urbanization of population that has taken place in the recent years. The spectacular increase in the number and size of urban centers is indicated by the fact that there are now 941 cities in the United States with over 10,000 population compared with 726 in 1920, and that these cities in the aggregate gained 11,600,000, or 25 percent, between 1920 and 1930, and now contain 47 percent of the total population of the country. Eighty-five of these cities gained over 100 per cent of their 1920 population, while 134 others experienced growths between 50 percent and 100 percent.

Not only have the urban centers gained enormously in population during the past decade, but the rural areas have lost heavily. Whereas in other periods the settlement of new lands resulted in rural gains outbalancing the losses in the older farming districts, since 1920 there has been no extensive frontier development to compensate for the losses elsewhere. During the past ten years the net migration from many areas has exceeded by a considerable amount the large natural increase, and consequently it appears that for the first time in our history the total rural population has actually declined.

Census returns from various districts in all parts of the United States indicate that there is a definite trend away from the smaller towns and the unincorporated areas. Of the 2,200 counties in the country which contain no community of 10,000 or more population, about 1,200 declined between 1920 and 1930. In the majority of the remaining counties the gains were comparatively slight, while in others there were indications of losses in the distinctly rural portions. These early reports tend to substantiate the Department of Agriculture estimate that the last decade has in all probability seen a loss of 4,000,000 people on the farms of the United States.

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

These movements of rural population may be illustrated by the group of Lake States, including Ohio, Indiana, Illinois, Michigan and Wisconsin. These states have a total of 436 counties, of which 241 lost population during the past decade. Of the losing counties, 220 were predominantly rural and in the aggregate their loss amounted to 8 percent of their 1920 population in addition to their entire natural increase. The 71 other counties with no place of 10,000 or more inhabitants gained only 5 percent since 1920; and of these, 32 were adjacent to counties distinctly urban in character.

The explanation of much of the rural decline is simple. The widespread use of motor-driven machinery and the introduction of scientific farm practices have made it possible for a smaller number of workers to produce a larger output. Increased labor efficiency in other rural industries, such as coal mining where modern drilling and loading machines have been adopted, has released many workers. Additional opportunities for untrained workers in the cities, brought about by the decrease in the foreign labor supply after the drastic restrictions on immigration went into effect and by the unusual growth in the service industries, have been instrumental in accelerating the migration from rural districts, a notable example being the movement of negroes from southern farms to industrial cities. And, finally, there has been a tendency for farmers upon retirement to move to communities with special attractions as resorts or home centers, as contrasted with the former tendency to remain on the farm.

There have been several attempts to minimize the significance of this urbanization process on the basis that it has been the smaller cities, distinctly less urban in character, which have shown the fastest rate of growth. Color is lent to this argument by the fact that some of the most spectacular gains in the country occurred in cities of between 10,000 and 25,000 population. Since 1920, that group of cities has increased in number by 133; it has gained 28 percent in population and

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

absorbed 11 percent of the total growth of the country. A detailed examination of this group shows, however, that the fastest growing cities are mainly suburban to the largest cities in the country. Their growth, therefore, represents an overflow from the metropolitan centers and may be attributed to the attractions of the most highly urbanized districts.

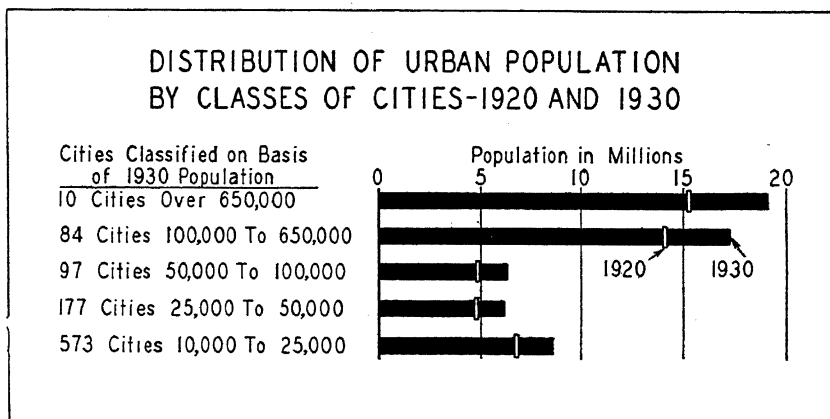


CHART 1

Since 1920, there has been a net increase of 21 in the class of cities having between 50,000 and 100,000 inhabitants and of 35 in the 25,000 to 50,000 group. These two groups each accounted for about 8 percent of the national growth and each increased about 28 percent. Cities with 100,000 or more increased in number from 68 in 1920 to 94 in 1930 and now include about 30 percent of the total population of the country. Between 1920 and 1930 these 94 cities gained about 7,000,000, representing a 24 percent rate of growth and amounting to over 41 percent of the national increase.

The total growth of the largest ten cities in the United States amounted to 3,757,000, an increase at the rate of 24.4 percent—a rate which is 50 percent higher than that for the nation as a whole. This growth occurred in spite of the fact that the increase in cities such as Philadelphia, Boston and Cleveland

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

was limited by the presence of surrounding communities which they have not yet annexed. If the suburban territory of these ten cities were included, the proportion of the country's growth occurring in their metropolitan areas would be raised approximately from 20 percent to 40 percent. In this connection, it might be observed that numerically New York City registered the largest decennial increase ever recorded by any city in this country, while the metropolitan area, consisting of New York City and its surrounding suburban territory within 40 miles of the city hall, experienced a phenomenal population growth, exceeding by 200,000 the total increase in the State of California, a gain equivalent to one out of every seven persons added to the country's total population.

The magnitude of the urbanization movement is indicated by the growth of the entire group of cities of over 10,000 population, which absorbed 68 percent of the country's total gain; and if the suburban areas of the cities over 50,000 were included, the proportion is raised to 86 percent. These facts are significant as showing the continued growth of the large cities and as proof that much of the rapid gain in the smaller cities was due to their suburban character. One further observation seems pertinent at this point. Since the Census Bureau arbitrarily defines townships, unincorporated towns and all places of less than 2,500 inhabitants as rural, a good deal of the suburban population which is essentially urban in character will appear in official classifications as rural. This classification thus tends to mask the actual rural losses which have occurred in purely rural counties.

GROWTH OF SPECIAL CLASSES OF CITIES

While the urban districts in general grew rapidly in population during the past decade, the different cities did not share equally in this growth. Some actually lost inhabitants while the increases in the commercial centers, with some outstanding exceptions, were quite moderate. On the other hand, certain

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

manufacturing cities depending largely upon new and rapidly expanding industries experienced remarkable gains, and the home communities and tourist resorts made notable progress.

Some of the decade's most dramatic population shifts to cities have been caused by the desire for pleasure or for easier ways of living. The improved standard of living in the United States has resulted in an increase in the amount of travel for pleasure, in a greater proportion of young people seeking higher education, in more frequent and earlier retirement, and in the selection by the leisure and retired classes of communities whose chief feature is their attractiveness as home centers.

Widespread automobile ownership, the development of good roads, and an increase in vacationing have all contributed to the development of mountain resorts, such as Asheville and Hot Springs, seashore resorts, such as Atlantic City, and a large number of places having natural scenic beauty or special historical associations. In northern New England and New York and in the Lake States many communities which were faced with losses as their trade or lumbering declined regained their importance as a result of the exploitation of their intrinsic appeals for tourists.

The large number of young people now continuing their education beyond high school and the social and cultural advantages afforded by communities with educational and governmental institutions have caused remarkable gains in many college towns and state capitals. More than half the state capitals grew faster than the national group of cities of corresponding size, while 14 increased by over 50 percent and two more than doubled their 1920 population. It is noteworthy that Washington grew considerably in the last ten years, in spite of the release of many thousands of emergency government workers temporarily employed during the height of war activities.

The mild equable climate of Florida and California has appealed to large numbers of the retired and leisure classes

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

whose choice of a home community is based on the play motive rather than the work motive. Consequently, such cities as Miami and Los Angeles have received heavy migrations of this element in addition to the tourist class.

Another group of cities in which there were some considerable gains includes those cities dependent mainly upon a single large industry for whose product there has been an expanding market. Cities like Detroit and South Bend, Akron and Tulsa, representing automobiles, rubber and oil, each have specific reasons for their growth and prosperity. And the newer the commodity produced, the more rapid the growth.

Generally speaking, commercial cities grew only moderately but there were a few conspicuous exceptions. Cities like Charlotte, Chattanooga, Oklahoma City, Houston and Dallas, located in areas which experienced considerable economic improvement during the past decade, profited by the increased purchasing power of their trade territories. The greater prosperity of the three southwestern cities just mentioned was due partly to the development of the oil industry and partly to the substitution of field crops for grazing.

In marked contrast to the almost universal urban growth throughout the country, there were a few cities that recorded losses of population during the last ten years due to the outward migration of workers seeking employment elsewhere. This was especially true of the textile and shoe cities of New England—Manchester, New Bedford, Fall River, Lawrence, Lowell, Brockton and Haverhill—which all suffered considerable declines due to the removal of many of their mills to other areas. Certain coastal cities which had large numbers of workers engaged in war-time activities also have lost population. This is because the 1920 census was taken before the deflation from boom conditions really became effective, and the population in these cities naturally declined after the emergency passed. This was particularly true in Hoboken and Hampton Roads, centers of shipping and shipbuilding during

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

the war, and in Bridgeport and Wilmington, where large quantities of munitions were manufactured. Thus, people moved not only from rural to urban districts but also between cities and from one industry to another, according to the relative opportunities for employment.

However, there were some cities, starting as boom towns in certain industries, which retained their early growth and made substantial gains after the impetus of the initial stimulus subsided. During the boom period these cities, of which Wichita Falls and Shreveport are good examples, were also developing permanent commercial activities which have since enabled them to maintain their lead over longer established cities.

GEOGRAPHICAL DISTRIBUTION OF POPULATION

As might be expected from the extensive rural losses and the irregular urban gains, the population growth of the United States between 1920 and 1930 was very unevenly distributed among the several sections of the country. In general, the large and populous states recorded the most gain, while those devoted chiefly to farming showed the least. This is strikingly illustrated by the figures for the largest ten states—New York, Pennsylvania, Illinois, Ohio, Texas, California, Michigan, Massachusetts, New Jersey and Missouri. During the last ten years those states gained 11,225,000 or about two-thirds of the total population increase for the entire country, and they now contain over half the people of the nation. On the whole, the principal factors that influenced the distribution of population throughout the country were industrial expansion, the development of oil fields, and the attraction of a favorable climate, and the heaviest gains occurred where these economic considerations predominated.

It may be interesting to consider the significance of changing regional trends of population distribution by broad areas. Discarding the Mississippi as an arbitrary boundary between the East and the West, and dividing the country according to

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

traditional lines into North, South and West, the ten years' gains were 15 percent, 13.5 percent and 33.4 percent, respectively. Thus it would appear that, in one sense, the West—the Rocky Mountain and Pacific Coast states—is still the fastest growing section. But the numerical increases tell a different story: North, 9,337,000; South, 4,668,000; West,

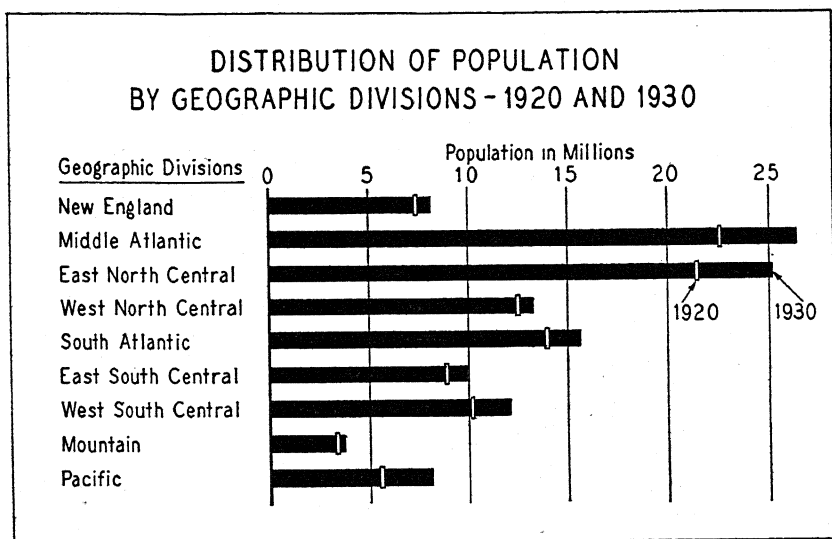


CHART 2

2,982,000. These rates of growth were far from uniform in the major geographical divisions of these three regions. In the North, the industrial belt including New York, New Jersey, Pennsylvania and the Lake States increased by nearly 7,800,000 or 17.8 percent, while New England, experiencing a severe textile depression, grew by 10.4 percent and the grain states of the West North Central division—Minnesota, Iowa, the Dakotas, Nebraska and Kansas—had the smallest rate of growth in the country, only 5.8 percent. In the South, the discovery of oil and the expansion of agricultural operations in Texas, Oklahoma and Louisiana contributed toward a population growth of 21.4 percent in this group of states, while the

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

remainder of the region, suffering from heavy migration losses in most states, gained at a rate of only 10 percent, and this increase may be high because the efficiency of the 1930 census was probably especially effective in states so distinctly rural in character. In the West, the Pacific states, favored by the exploitation of California's climate and oil deposits, enjoyed a growth of 2,610,000 or 47 percent, while in contrast the Mountain states increased by only 11 percent.

Turning to population growth by individual states, some remarkable gains are found. More than one-quarter of the total increase in the United States was concentrated in two states—California, in the Far West, with an increase of 2,245,148, and New York, in the East, with a growth of 2,234,276. Three other states—Michigan, Texas and Illinois—each account for more than 1,100,000 of the increase. Pennsylvania gained more than 900,000, and Ohio and New Jersey each gained more than 870,000. The real estate boom in Florida, capitalizing its exceptional climate, and the pronounced industrial development in North Carolina brought about impressive population gains in these two southern states. The importance of these ten states and their influence upon the distribution of population can be realized better when it is noted that this group of states, which had 47 percent of the national total in 1920, accounted for 70 percent of the past decade's increase.

In conclusion, the most significant tendencies indicated by the 1930 census are the slowing down in the national rate of growth and the tremendous shift of population from rural to urban districts. It is quite evident that the increase in the mobility of the American people has been much faster than the growth of population. Migrations, motivated by various causes and objectives, have occurred in volume and with rapidity during the past decade, and the changing trends in the regional distribution of population have much significance because they indicate a decline in the relative importance of

SIGNIFICANT FEATURES OF EARLY CENSUS RETURNS

rural industries, especially agriculture, and the increasing opportunities in the cities. The rapid growth of resorts and urban centers having special attractions to the tourist and retired classes is alone sufficient to show that there has been a general improvement in economic conditions in the United States during the last ten years with a consequent increase in purchasing power and a higher standard of living.

All these developments have a bearing upon the market for telephone service; and a consideration of these population changes is important to the telephone industry. The continued drift of population to the cities means an increasing demand for water, sewers, educational and recreational facilities, matters which bear directly upon the health and social welfare of the community. In the endeavor of public utility companies to render satisfactory service under conditions of rapid urban growth, their engineers are being faced with the serious problem of providing promptly adequate plant and distribution facilities.

Some of the conclusions based upon the preliminary reports of the 1930 census may be modified slightly as additional results are published. No doubt, too, the added data, especially that on occupations and on age, sex and nativity characteristics, will reveal other trends of significance to the telephone industry.

R. L. TOMBLIN